

**REMARKS**

Claim 1, 4-9, 11, and 12 are pending in the subject application. Claims 1, 4, 6-9, 11, and 12 have been rejected under 35 U.S.C. 103(a). Claim 5 is objected to but otherwise allowable.

The Applicants appreciate the Examiner's thorough examination of the subject application and, moreover, the Examiner's granting a telephone interview on October 4, 2005 and respectfully request reconsideration of the subject application based on the following remarks.

35 U.S.C. § 103(a) REJECTION

The Examiner has again rejected claims 1, 4, 8, and 9 under 35 USC 103(a) as unpatentable over Japanese Laid Open Patent Application Publication Number 10-333121 to Miyazaki, et al. ("Miyazaki" or the "Miyazaki Reference") in view of the Liquid Crystal Device Handbook of the 142<sup>nd</sup> Committee of Japan Society for the Promotion of Science (the "Handbook"); claim 7 under 35 USC 103(a) as unpatentable over Miyazaki and the Handbook, further in view of U.S. Patent Number 5,880,801 to Scherer, et al. ("Scherer" or the "Scherer Reference"); claim 6 under 35 USC 103(a) as unpatentable over Miyazaki and the Handbook, further in view of Japanese Published Laid-Open Patent Application JP 06-102485A ("Okada" or the "Okada Reference"); claim 11 under 35 USC 103(a) as unpatentable over Miyazaki in view of Japanese Laid Open Patent Application Publication Number 10-333121 to Miyazaki, et al. ("Miyazaki" or the "Miyazaki Reference"); and claims 11 and 12 under 35 USC 103(a) as unpatentable over Miyazaki in view of U.S. Patent Number 6,008,875 to Ikeno, et al. ("Ikeno" or the "Ikeno Reference"). The Applicants respectfully traverse these rejections for the reasons provide below.

In his Response to Arguments, the Examiner asserts that, "Vthmax denotes a

first threshold is not a relevant claim limitation but merely a notational issue, for which the sub-sentence in which  $V_{thmax}$  is introduced serves as a definition." The Applicants respectfully disagree.

More specifically, the Applicants assert that, the Miyazaki reference not teach, mention or suggest that the thickness of the liquid crystal layer ( $d$ ) is defined so that a first threshold voltage for transitioning the liquid crystal layer from the planar state to the focal conic state ( $V_{thFmax}$ ) for the region with a largest thickness  $d$ , e.g., region  $dA4$  in Figure 1, is less than the second threshold voltage for transitioning the liquid crystal layer from the focal conic state to the homeotropic state ( $V_{thHmin}$ ) for the region with a smallest thickness  $d$ , e.g., region  $dA1$  in Figure 1, as recited in claim 1. Miyazaki is completely silent about threshold voltages for the two regions.

Indeed, referring to Figures 11 and 16 of the Miyazaki reference, Figure 11 shows three regions (1, 2, and 3) of different thickness. By observation, region 1 has the largest thickness and region 3 has the smallest thickness. Referring to Figure 16, in which the three regions are shown in some relationship with threshold voltages  $V_{th2}$  and  $V_{th1}$ , there is nothing to suggest that

the thickness  $d$  of the liquid crystal layer is defined so that  $V_{thFmax}$  is less than  $V_{thHmin}$  in each of the plurality of pixels, where  $V_{thFmax}$  denotes the first threshold voltage for transitioning the liquid crystal layer included in a region with a largest thickness  $d$  of the liquid crystal layer from the planar state to the focal conic state, and  $V_{thHmin}$  denotes a second threshold voltage for transitioning the liquid crystal layer included in a region with a smallest thickness  $d$  of the liquid crystal layer from the focal conic state to a homeotropic state.

With respect to claim 6, nor can the Okada reference make up for the deficiencies of the Miyazaki reference and the Handbook. Likewise, with respect to claim 7, nor can the Scherer reference make up for the deficiencies of the Miyazaki

reference and the Handbook reference. Similarly with respect to claims 11 and 12, nor can the Ikeno reference make up for the deficiencies of the Miyazaki reference and the Handbook reference. Neither Okada nor Scherer nor Ikeno teaches, mentions or suggests defining the thickness  $d$  in terms of a threshold value in the region having the largest thickness and a threshold value in the region having the smallest thickness.

Accordingly, the Applicants assert that the claims are not made obvious by the cited references and, further, satisfy the requirements of 35 U.S.C. 100 et seq., especially § 103(a). As such, the Applicants believe that the claims are allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

The Applicants believe that no additional fee is required for consideration of the within Response. However, if for any reason the fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105**.

Date: October 26, 2005

Respectfully submitted,

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